# 0.8mm Height Wire Wound Power Inductors—WPN201608UF Series



## PROFILE

The ultra-thin body is an eternal theme of portable electronic devices represented by smart phones and smart wearable devices, and is one of the selling points of the product. Each big manufacturer constantly increase investment in technology, trying to further reduce the thickness of products, for example, the in-cell technology of the combination of LCD and touch panel, cancellation of 3.5 mm headphone interface, using lighting / Type C interface to realize the audio transmission function.

In order to satisfy the demand of lighter and thinner for portable device, Sunlord electronics developed WPN201608UF series power inductors with the dimension of 2.0mm×1.6mm and the height of 0.8 mm Max. for DC-DC power conversion circuit based on rich experience in inductor development and advanced automation winding production platform.

## BACKGROUND AND DEVELOPMENT OBJECTIVES

- Satisfy the trend of slim and thin profile, light weight for smart phone and smart wearable device.
- Satisfy the smart device's demand of high power density for the inductor.
- Satisfy the smart device's demand of high stability quality for the inductor.

## **FEATURES**

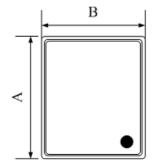
- 2.0mm×1.6mm package, height 0.8mm Max.
- High density alloy powder magnetic core with high saturation current characteristics
- Using flat enameled copper wires to achieve low DCR for low heating

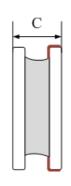
## APPLICATIONS

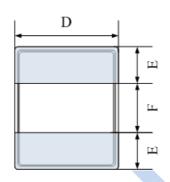
- DC-DC power supply circuit of smart phones, smart wearable devices
- Equipments with restricted height

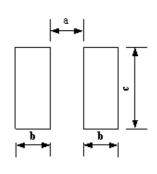
#### Sunlord

# SHAPE AND DIMENSIONS









Unit: mm

Series	Α	В	С	D	E	F	а	b	С
WPN201608UF	2.00±0.2	1.60±0.2	0.80 Max.	1.60±0.2	0.60±0.2	0.80±0.2	0.70Typ.	0.70Тур.	1.70Typ.

# SPECIFICATIONS

### WPN201608UF Series

	Inductance	Min.	DC Resistance		Saturation Current		Heat Rating Current	
Part Number	1MHz,1V	Self-resonant frequency	Max.	Тур.	Max.	Тур.	Max.	Тур.
Units	μH	MHz	Ω	Ω	Α	А	А	Α
Symbol	L	SRF	DCR		Isat		Irms	
WPN201608UFR47MT	0.47±20%	68	0.027	0.024	4.30	4.70	4.60	5.30
WPN201608UF1R0MT	1.00±20%	46	0.080	0.070	4.10	4.60	2.80	3.20

# PRODUCTION STAGE

In Mass Production